IN THE CLAIMS:

1. (Original) A hard, abrasion and corrosion-resistant material useful as an ultra-thin protective overcoat layer for a magnetic or magneto-optical (MO) recording medium, which material comprises hydrogenated carbon (C:H) formed by a process comprising simultaneous sputter and plasma-enhanced chemical vapor (PECVD) deposition of said hydrogenated carbon (C:H), wherein the amount of carbon atoms in said C:H material derived from the PECVD component of said process is less than about 50 at. %.

2. (Original) The material according to claim 1, wherein the amount of carbon atoms in said C:H material derived from the PECVD component of said process is at least about 30 at. %.

3. (Original) The material according to claim 1, wherein the position of the Raman G-band of the C:H material is about 1553 cm^{-1}.

4. (Original) The material according to claim 1, wherein the film resistance of the C:H material is as high as about 85 k Ω.

5. (Original) A magnetic or MO recording medium comprising a protective overcoat layer formed of the C:H material according to claim 1.

6. (Original) The medium according to claim 5, wherein the thickness of said protective overcoat layer is not greater than about 30 Å.

Claims 7 - 15 (Withdrawn)

16. (Original) A recording medium, comprising:

(a) a substrate;

(b) a stack of thin film layers on said substrate; and

(c) a protective overcoat layer on an uppermost layer of said stack of thin film layers, wherein:

said protective overcoat layer comprises a hard, abrasion and corrosion-resistant material comprising hydrogenated carbon (C:H) formed by a process comprising simultaneous sputter and plasma-enhanced chemical vapor (PECVD) deposition of said hydrogenated carbon (C:H) material, wherein the amount of carbon atoms in said C:H material contributed by the PECVD component of said process is less than about 50 at. %.

17. (Original) The medium as in claim 16, wherein the amount of carbon atoms in said C:H material contributed by the PECVD component of said process is at least about 30 at. %.

18. (Original) The medium as in claim 16, wherein the position of the Raman G-band of the C:H material of said protective overcoat layer is about 1553 cm^{-1} and the film resistance of said C:H material of said protective overcoat layer is as high as about 85 k Ω.

19. (Original) The medium as in claim 16, wherein:

said stack (b) of thin film layers comprises a stack of layers for a magnetic or magneto-optical (MO) recording medium.

20. (Original) The medium as in claim 19, wherein:

said substrate (a) is disk-shaped.

21. (Original) The medium as in claim 19, wherein:

said stack (b) of thin film layers comprises a stack of layers for a magnetic recording medium; and

said protective overcoat layer (c) is not greater than about 30 Å thick.

22. (Original) The medium as in claim 21, wherein:

said stack (b) of thin film layers includes at least one ferromagnetic layer comprising Co.

Claims 23 - 25 (Withdrawn)

26. (Currently amended) A magnetic recording medium, comprising:

(a) at least one ferromagnetic thin film layer containing Co; and

(b) means for protecting said at least one Co-containing ferromagnetic thin film layer from corrosion under high temperature, high humidity environments, comprising a layer of a hard, abrasion and corrosion-resistant material comprising hydrogenated carbon (C:H) formed by a process comprising simultaneous sputter and plasma-enhanced chemical vapor (PECVD) deposition of said hydrogenated carbon (C:H) material, wherein the amount of carbon atoms in said C:H material contributed by the PECVD component of said process is less than about 50 at. %.